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**TOWN OF WELLESLEY  
TOLLES –PARSONS SENIOR CENTER  
PROJECT OF SIGNIFICANT IMPACT ANALYSIS  
October 14, 2014**

This analysis presents the municipal impact assessment associated with the proposed Tolles-Parsons Senior Center (the Senior Center) to be located at 494-496 Washington Street (Route 16) in Wellesley, Massachusetts.

**WATER SERVICE**

The Senior Center will be served from the town's 10-inch water main located along the center of Washington Street. A 6-inch -main line to service an on-site fire hydrant is proposed and from that main line, a 4-inch fire protection line and the 2-1/2" domestic line will service the Senior Center.

Two existing residential service lines on site will be removed from service.

The connections, removals and metering will be in accordance with Wellesley Water & Sewer requirements.

Wellesley' Water and Sewer Department has indicated that there is sufficient capacity for the new connection.

**SANITARY SEWER**

The Senior Center will be served by the existing sanitary sewer connection to Atwood Street within a recorded easement. There is a 4-inch clay pipe terminating at an existing sewer manhole at the northeast perimeter of the property. The existing manhole accepts piped flows from the home at 494 Washington Street and the past building at 496 Washington Street.

A new on-site sewer manhole is proposed at the property line and the existing manhole and on-site piping will be removed. A new 6-inch sanitary sewer line is proposed to collect effluent from the Senior Center. Kitchen flow will exit the Senior Center through an on-site underground grease trap which will connect into the new 6-inch line.

A video inspection of the existing clay sewer service from the project site to Atwood Road was completed in July 2013. The video inspection showed tree root intrusion through pipe joints and some minor sagging. Review of this information indicates that the pipe can be reused providing that it is reviewed by the DPW and properly lined if needed. The DPW recommends root cutting and a confirmatory video inspection prior to installing a liner, which will be performed by this project from the new manhole to the connection to Atwood Street.

## **STORM SEWER**

The existing site does not have a formal stormwater drainage system. The topography is generally flat with a northeast to southwest gentle slope allowing stormwater runoff to flow either to abutting properties or into the Washington Street right-of-way. Stormwater enters into Washington Street's closed piping system collected by catch basins along the curbed gutter.

The Senior Center will increase impervious surfaces on site such as roof top, sidewalks and pavement. To mitigate any potential increase in stormwater runoff, a closed drainage system is proposed to capture, direct, clean and infiltrate stormwater.

The Senior Center's drainage system consists of roof gutters and downspouts, drip strips, water quality catch basins, catch basins with deep sumps and hoods, rain gardens and a sub-surface groundwater detention/recharge system. The drainage system has been designed to exceed local and state regulatory requirements and is described in detail in the Drainage Analysis.

Soil borings have been performed which indicate that groundwater is more than 20 below the surface and percolation tests have been performed by a registered soil evaluator indicating that the soils have exceptional percolation rates for stormwater infiltration.

The Senior Center will provide excess capacity to capture, store and infiltrate stormwater on site while significantly reducing stormwater runoff to the surrounding abutters and municipal system well below existing conditions.

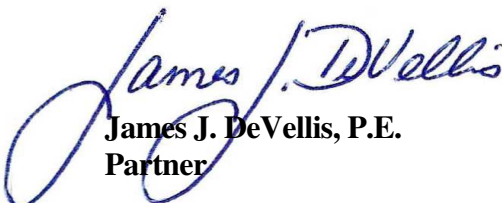
In summary and as described within the Drainage Analysis, a project is required to only match the rate at which stormwater leaves the property. The volume of stormwater leaving the site is not regulated and not required to be reduced. The design provides substantial decreases in the rate at which stormwater leaves the site and for all of the storm events analyzed (2-year through 100-year events) and in addition, the design will substantially decreases the volume of stormwater leaving the site. For approximately 80% of the expected storm events, all runoff from the site has been eliminated.

## **ELECTRIC SERVICE**

The Wellesley Municipal Light Department on indicated that there was sufficient capacity for the new connection in the transformer vault in on Washington Street. It will be necessary for the new secondary service to be extended under Washington Street sidewalk to the Senior Center. An on-site transformer has been designed on the site.

Sincerely,

**DEVELLIS ZREIN INC.**

  
**James J. DeVellis, P.E.**  
**Partner**

